

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

10/518939

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference

(if desired) (12 characters maximum) 67440-A-PCT/JPW/JCC

Box No. I TITLE OF INVENTION

SPIROCYCCLIC PIPERIDINES AS MCH1 ANTAGONISTS AND USES THEREOF

Box No. II APPLICANT

 This person is also inventor

Name and address: (If family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

SYNAPTIC PHARMACEUTICAL CORPORATION
215 College Road
Paramus, New Jersey 07652
United States of America

Telephone No.

None

Facsimile No.

None

Teleprinter No.

None

Applicant's registration No. with the Office

None

State (that is, country) of nationality:

United States of America

State (that is, country) of residence:

United States of America

This person is applicant for the purposes of:

 all designated

States

 all designated States except

the United States of America

 the United States of America only the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (If family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

MARZABADI, Mohammad
153 Woodland Avenue
Ridgewood, New Jersey 07450
United States of America

This person is:

 applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

United States of America

State (that is, country) of residence:

United States of America

This person is applicant for the purposes of:

 all designated

States

 all designated States except

the United States of America

 the United States of America only the States indicated in the Supplemental Box Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE: OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

 agent common representative

Name and address: (If family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

WHITE, John P.
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, New York 10036
United States of America

Telephone No.

(212) 278-0400

Facsimile No.

(212) 391-0526

Teleprinter No.

None

Agent's registration No. with the Office

28,678

Address for correspondence: Mark this check-box when no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (If a family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State or residence is indicated below.)		1 This person is:
JIANG, Yu 179 Manhattan Ave., Apt. 7B Jersey City, New Jersey 07370 United States of America		<input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)
Applicant's registration No. with the Office		

State (that is, country) of nationality	State (that is, country) of residence
People's Republic of China	United States of America
This person is applicant: <input type="checkbox"/> all designated States: <input type="checkbox"/> all designated States except: <input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental box	

Name and address: (If a family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State or residence is indicated below.)		1 This person is:
LU, Kai 67A, Glenwood Ave. Elmwood Park, New Jersey 07407 United States of America		<input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)
Applicant's registration No. with the Office		

State (that is, country) of nationality	State (that is, country) of residence
People's Republic of China	United States of America
This person is applicant: <input type="checkbox"/> all designated States: <input type="checkbox"/> all designated States except: <input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental box	

Name and address: (If a family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State or residence is indicated below.)		1 This person is:
CHEN, Chien-An 49-02 196th Place Fresh Meadows, New York 11365 United States of America		<input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)
Applicant's registration No. with the Office		

State (that is, country) of nationality	State (that is, country) of residence	
Taiwan	United States of America	
This person is applicant: <input type="checkbox"/> all designated States: <input type="checkbox"/> all designated States except: <input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental box		
Name and address: (If a family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State or residence is indicated below.)		1 This person is:
DELEON, John 7427 Boulevard East, Apt. 5 North Bergen, New Jersey 07047 United States of America		<input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)
Applicant's registration No. with the Office		

State (that is, country) of nationality	State (that is, country) of residence
Phillipines	United States of America
This person is applicant: <input type="checkbox"/> all designated States: <input type="checkbox"/> all designated States except: <input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental box	

<input checked="" type="checkbox"/> Further applicants and/or (further) inventors are indicated on another continuation sheet.		
--	--	--

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

WETZEL, John
16-08 Well Drive
Fairlawn, New Jersey 07410
United States of America

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

United States of America

State (that is, country) of residence:

United States of America

This person is applicant for the purposes of: all designated State: all designated States except: the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

ANDERSEN, Kim
744 Fernwood Court
Ridgewood, New Jersey 07450
United States of America

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

Denmark

State (that is, country) of residence:

United States of America

This person is applicant for the purposes of: all designated State: all designated States except: the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: all designated State: all designated States except: the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: all designated State: all designated States except: the United States of America only the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on another continuation sheet.

Box No. V DESIGNATION OF STATES

Mark the applicable check-boxes below; at least one must be marked.

The following designations are hereby made under Rule 4.9(a):

Regional Patent

AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment desired, specify on dotted line)

EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT

EP European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT

OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

<input checked="" type="checkbox"/> AE United Arab Emirates	<input checked="" type="checkbox"/> GM Gambia	<input checked="" type="checkbox"/> NZ New Zealand
<input checked="" type="checkbox"/> AG Antigua and Barbuda	<input checked="" type="checkbox"/> HR Croatia	<input checked="" type="checkbox"/> OM Oman
<input checked="" type="checkbox"/> AL Albania	<input checked="" type="checkbox"/> HU Hungary	<input checked="" type="checkbox"/> PH Philippines
<input checked="" type="checkbox"/> AM Armenia	<input checked="" type="checkbox"/> ID Indonesia	<input checked="" type="checkbox"/> PL Poland
<input checked="" type="checkbox"/> AT Austria	<input checked="" type="checkbox"/> IL Israel	<input checked="" type="checkbox"/> PT Portugal
<input checked="" type="checkbox"/> AU Australia	<input checked="" type="checkbox"/> IN India	<input checked="" type="checkbox"/> RO Romania
<input checked="" type="checkbox"/> AZ Azerbaijan	<input checked="" type="checkbox"/> IS Iceland	<input checked="" type="checkbox"/> RU Russian Federation
<input checked="" type="checkbox"/> BA Bosnia and Herzegovina	<input checked="" type="checkbox"/> JP Japan	<input checked="" type="checkbox"/> SC Seychelles
<input checked="" type="checkbox"/> BB Barbados	<input checked="" type="checkbox"/> KE Kenya	<input checked="" type="checkbox"/> SD Sudan
<input checked="" type="checkbox"/> BG Bulgaria	<input checked="" type="checkbox"/> KG Kyrgyzstan	<input checked="" type="checkbox"/> SE Sweden
<input checked="" type="checkbox"/> BR Brazil	<input checked="" type="checkbox"/> KP Democratic People's Republic of Korea	<input checked="" type="checkbox"/> SG Singapore
<input checked="" type="checkbox"/> BY Belarus	<input checked="" type="checkbox"/> KR Republic of Korea	<input checked="" type="checkbox"/> SK Slovakia
<input checked="" type="checkbox"/> BZ Belize	<input checked="" type="checkbox"/> KZ Kazakhstan	<input checked="" type="checkbox"/> SL Sierra Leone
<input checked="" type="checkbox"/> CA Canada	<input checked="" type="checkbox"/> LC Saint Lucia	<input checked="" type="checkbox"/> TJ Tajikistan
<input checked="" type="checkbox"/> CH & LI Switzerland and Liechtenstein	<input checked="" type="checkbox"/> LK Sri Lanka	<input checked="" type="checkbox"/> TM Turkmenistan
<input checked="" type="checkbox"/> CN China	<input checked="" type="checkbox"/> LR Liberia	<input checked="" type="checkbox"/> TN Tunisia
<input checked="" type="checkbox"/> CO Colombia	<input checked="" type="checkbox"/> LS Lesotho	<input checked="" type="checkbox"/> TR Turkey
<input checked="" type="checkbox"/> CR Costa Rica	<input checked="" type="checkbox"/> LT Lithuania	<input checked="" type="checkbox"/> TT Trinidad and Tobago
<input checked="" type="checkbox"/> CU Cuba	<input checked="" type="checkbox"/> LU Luxembourg	<input checked="" type="checkbox"/> TZ United Republic of Tanzania
<input checked="" type="checkbox"/> CZ Czech Republic	<input checked="" type="checkbox"/> LV Latvia	<input checked="" type="checkbox"/> UA Ukraine
<input checked="" type="checkbox"/> DE Germany	<input checked="" type="checkbox"/> MA Morocco	<input checked="" type="checkbox"/> UG Uganda
<input checked="" type="checkbox"/> DK Denmark	<input checked="" type="checkbox"/> MD Republic of Moldova	<input checked="" type="checkbox"/> US United States of America
<input checked="" type="checkbox"/> DM Dominica	<input checked="" type="checkbox"/> MG Madagascar	(continuation-in-part)
<input checked="" type="checkbox"/> DZ Algeria	<input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia	<input checked="" type="checkbox"/> UZ Uzbekistan
<input checked="" type="checkbox"/> EC Ecuador	<input checked="" type="checkbox"/> MN Mongolia	<input checked="" type="checkbox"/> VC Saint Vincent and the Grenadines
<input checked="" type="checkbox"/> EE Estonia	<input checked="" type="checkbox"/> MW Malawi	<input checked="" type="checkbox"/> VN Viet Nam
<input checked="" type="checkbox"/> ES Spain	<input checked="" type="checkbox"/> MX Mexico	<input checked="" type="checkbox"/> YU Yugoslavia
<input checked="" type="checkbox"/> FI Finland	<input checked="" type="checkbox"/> MZ Mozambique	<input checked="" type="checkbox"/> ZA South Africa
<input checked="" type="checkbox"/> GB United Kingdom	<input checked="" type="checkbox"/> NO Norway	<input checked="" type="checkbox"/> ZM Zambia
<input checked="" type="checkbox"/> GD Grenada		<input checked="" type="checkbox"/> ZW Zimbabwe
<input checked="" type="checkbox"/> GE Georgia		
<input checked="" type="checkbox"/> GH Ghana		

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

<input checked="" type="checkbox"/> NI Nicaragua	<input checked="" type="checkbox"/> PG Papua New Guinea	<input checked="" type="checkbox"/> SY Syrian Arab Republic
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Supplemental Box

If the Supplemental Box is not used, this sheet should not be included in the request.

1. If, in any of the Boxes, except Boxes Nos. VII(I) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
 - (i) if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
 - (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the States, (and/or, where applicable, ARJPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
 - (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the States, (and/or, where applicable, ARJPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
 - (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
 - (v) if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "parent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;
 - (vi) if, in Box No. VI, there are more than five earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.
2. If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.

Continuation of Box No. V:

US: 10/189,146
 filed: 03 July 2002
 (03.07.02)

Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) (03.07.02) 03 July 2002	10/189,146	US		
item (2)				
item (3)				
item (4)				
item (5)				

 Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

all items item (1) item (2) item (3) item (4) item (5) other, see
Supplemental Box

* Where the earlier application is an ARPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)).

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / US

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year) Number: Country (or regional Office)

Box No. VIII DECLARATIONS

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration).

Number of declarations

<input type="checkbox"/> Box No. VIII (i)	Declaration as to the identity of the inventor	:
<input type="checkbox"/> Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	:
<input type="checkbox"/> Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
<input type="checkbox"/> Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
<input type="checkbox"/> Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	:

BEST AVAILABLE COPY

Box No. IX CHECK LIST: LANGUAGE OF FILING

This international application contains:		This international application is accompanied by the following items (mark the applicable check-boxes below and indicate in right column the number of each item):		Number of items
(a) the following number of sheets in paper form:		1. <input checked="" type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> original separate power of attorney 3. <input type="checkbox"/> original general power of attorney 4. <input type="checkbox"/> copy of general power of attorney; reference number, if any: 5. <input type="checkbox"/> statement explaining lack of signature 6. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 7. <input type="checkbox"/> translation of international application into (language): 8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 9. <input type="checkbox"/> sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-K or other)) (i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13(1) only (and not as part of the international application) (ii) <input type="checkbox"/> only where check-box (b)(i) or (b)(ii) is marked in left column additional copies including, where applicable, the copy for the purposes of international search under Rule 13(1) (iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listing pen mentioned in left column 10. <input checked="" type="checkbox"/> other (specify): Express Mail Certificate of Mailing dated July 3, 2003, bearing Express Mail Label No. EV325704057US		
(b) sequence listing part of description filed in computer readable form:		(i) <input type="checkbox"/> only (under Section 801(a)(i)) (ii) <input type="checkbox"/> in addition to being filed in paper form (under Section 801(a)(ii))		
Type and number of carriers (diskette, CD-ROM, CD-K or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(iii), in right column):				
Figure of the drawings which should accompany the abstract:		Language of filing of the international application: English		

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Note to the applicant: indicate the name of the person, signature and the capacity in which the person signs (if such capacity is not obvious from reading the request).

SYNAPTIC PHARMACEUTICAL CORPORATION

Theresa A. Branchek 7/16/03NAME: Theresa A. Branchek DATE
TITLE: Executive Vice President

For receiving Office use only	
1. Date of actual receipt of the purposes international application: 2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received:	
3. Conected date of actual receipt due to later but timely received papers or drawings completing the purposed international application: 4. Date of timely receipt of the required corrections under PCT Article 11(2)	
5. International Searching Authority (if two or more are competent): ISA 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid	

For International Bureau use only	
Date of receipt of the record copy by the International Bureau:	

DESI AVAILABLE COPY

Box No. IX CHECK LIST: LANGUAGE OF FILING

This international application contains:

(a) the following number of sheets in paper form:
 request (including declaration sheet) : 9
 description (excluding sequence listing part) : 127
 claims : 11
 abstract : 1
 drawings : 0

Sub-total number of sheets : 148

sequence listing part of description (total number of sheets if filing in paper form, whether or not also filed in computer readable form; see (b) below) : 0

Total number of sheets : 148

(b) sequence listing part of description filed in computer readable form:

(i) only (under Section 10(1)(x)(i))
 (ii) in addition to being filed in paper form (under Section 10(1)(x)(ii))

Type and number of carriers (storage, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 10(iii), in right column):

This international application is accompanied by the following items (mark the applicable check-boxes below and indicate in right column the number of each item):

1. fee calculation sheet : 1
2. original separate power of attorney : 1
3. original general power of attorney : 1
4. copy of general power of attorney; reference number, if any: : 1
5. statement explaining lack of signature : 1
6. priority document(s) identified in Box No. VI as item(s): : 1
7. translation of international application into language(s): : 1
8. separate indications concerning deposited microorganism or other biological material : 1
9. sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other)) :
 - (i) copy submitted for the purposes of international search under Rule 13(1) only (and not as part of the international application)
 - (ii) copy where check-box (b)(i) or (b)(ii) is marked in left column; additional copies including, where applicable, the copy for the purposes of international search under Rule 13(1)
 - (iii) together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column.

10. other (specify): Express Mail Certificate of Mailing dated July 3, 2003, bearing Express Mail Label No. EV325704057US

Figure of the drawings which should accompany the abstract

Language of filing of the international application: English

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Note to the International Bureau: indicate the name of the person signing and the capacity in which the person signs (if any; capacity is not obvious from reading the request).

Mohammed E. Marzabadi 07/30/03
 Mohammad Marzabadi DATE

Yu Yiang 07/30/03
 DATE

Kai Lu 07/30/2003 DATE

Chien-An Chen 07/30/03 DATE

For receiving Office use only

1. Date of actual receipt of the purposes international application:

3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purposed international application:

4. Date of timely receipt of the required corrections under PCT Article 11(2)

5. International Searching Authority (if two or more are competent): JSA

6. transmission of search copy delayed until search fee is paid

2. Drawings:

 received: not received:

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

Box No. IX CHECK LIST: LANGUAGE OF FILING

This international application contains:

(a) the following number of sheets in paper form:

request (including declaration sheet)	9
description (excluding sequence listing part)	127
claims	11
abstract	1
drawings	0

Sub-total number of sheets: 148

sequence listing part of description (actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (b) below): 0

Total number of sheets: 148

(b) sequence listing part of description filed in computer readable form:

(i) only (under Section 801(a)(i))
 (ii) in addition to being filed in paper form (under Section 801(a)(ii))

Type and number of carriers (disks, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(iii), in right column):

This international application is accompanied by the following items (mark the applicable check-boxes below and indicate in right column the number of each item):

1. fee calculation sheet : 1
 2. original separate power of attorney :
 3. original general power of attorney :
 4. copy of general power of attorney; reference number, if any:
 5. statement explaining lack of signature :
 6. priority document(s) identified in Box No. VI as item(s):
 7. translation of international application into (language):
 8. separate indications concerning deposited microorganism or other biological material :
 9. sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))
 (i) copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)
 (ii) only where check-box (b)(i) or (b)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter
 (iii) together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column.

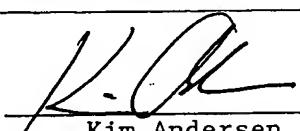
10. other (specify): July 3, 2003, bearing Express Mail label No. EV325704057US

Figure of the drawings which should accompany the abstract:

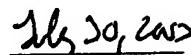
Language of filing of the international application: English

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Note to the signatory: Indicate the name of the person signing and the capacity in which the person signs (if any; capacity is not otherwise from reading the minutes).



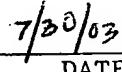
Kim Andersen



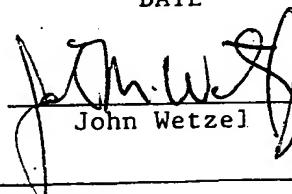
DATE



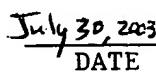
John Deleon



DATE



John Wetzel



DATE

For receiving Office use only

1. Date of actual receipt of the purposed international application:

3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purposed international application:

4. Date of timely receipt of the required corrections under PCT Article 11(2):

5. International Searching Authority (if two or more are competent): ISA:

6. Transmittal of search copy delayed until search fee is paid

2. Drawings:

 received: not received:

For International Bureau use only

Date of receipt of the record copy by the International Bureau: